

**IN THE SPECIFICATION:**

Please amend the specification as follows:

Please replace the first paragraph on page 1 with the following:

**FIELD OF THE INVENTION**

The invention relates to an X-ray examination apparatus and to a method for forming an X-ray image.

Please replace the second paragraph on page 1 with the following:

**BACKGROUND OF THE INVENTION**

U.S. Pat. No. 5,657,400 discloses a method for the correction of bad pixel values of an X-ray detector. A method is described for the identification and correction of defective pixels. For each pixel that is identified as being defective a correction code is stored in a defect table. For the identification a plurality of offset images is acquired first so as to be averaged. Subsequently, a plurality of X-ray images is acquired with a uniform exposure during a special calibration procedure; these images are also averaged. Said two averaged images are subtracted from one another. Defective pixels are determined on the basis of the difference. The calibration procedure is carried out prior to the actual X-ray exposure, without a patient being present in the X-ray beam path.

Please replace the fourth paragraph on page 2 with the following:

#### SUMMARY OF THE INVENTION

This object is achieved by means of an X-ray examination apparatus which includes an X-ray source, an X-ray detector including sensor elements for converting X-ray in electrical charges and a processing unit for the correction of image data and a defect detection unit for the detection of image defects that can be detected on the basis of image parameters that can be extracted from image data arising during clinical examinations and is suitable to adapt, in dependence on the detected image defects, the processing parameters used in the processing unit, whereby for the detection of notably image defects caused by defective sensor elements the defect detection unit includes a filter unit for filtering the image data, and a unit for averaging the filtered image data, and a comparison unit for comparing the filtered and averaged image data with a threshold value in order to form a defect table for the sensor elements in dependence on the threshold value.

Please replace the third full paragraph on page 7 with the following:

#### BRIEF DESCRIPTION OF THE DRAWINGS

An embodiment of the invention will be described in detail hereinafter with reference to the drawings.

Please replace the fifth full paragraph on page 7 with the following:

#### DETAILED DESCRIPTION OF THE DRAWINGS

FIG. 1 shows an X-ray examination apparatus which includes an imaging unit 1 that consists of an X-ray source 11, an X-ray beam path 12 and an X-ray detector 13. The imaging unit 1 is succeeded by a processing unit 2 with an offset correction unit 14, utilizing an offset correction rule 18, a gain correction unit 15, utilizing a gain correction factor 19, a correction unit 16 for the correction of defective pixels by means of a correction table 20, and a unit 17 for the correction of non-linear amplifier behavior by means of a look-up table (LUT) 21. The processing unit 2 is succeeded by a defect detection unit 3 in which the X-ray image corrected by the processing unit 2 is scrutinized for any residual image defects.